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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/499,598	02/07/2000	Mick Henniger	4103-40821	1489

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EXAMINER

MAHMOUDI, HASSAN

ART UNIT	PAPER NUMBER
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2175

DATE MAILED: 01/28/2004

8

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/499,598

Applicant(s)

HENNIGER ET AL.

Examiner

Tony Mahmoudi

Art Unit

2175

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 18 November 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

DIANE D. MIZRAHI  
PRIMARY PATENT EXAMINER  
TECHNOLOGY CENTER 21

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Remarks*

1. In response to communications filed on 18-November-2003, claims 9 and 17 are cancelled, and claims 1, 3-6, 11-14, and 18 are amended per applicant's request. Therefore, claims 1-8, 10-16, and 18 are presently pending in the application.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that said subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-8, 10-16, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson (U.S. Patent No. 6,003,130) in view of Tehrani et al (U.S. patent No. 5,878,248.)

As to claim 1, Anderson teaches an apparatus (see Abstract) comprising:

first data storage device, accessible to a motherboard (see figure 2), storing daughterboard boot-up code (see Abstract);

a coupler, coupling a daughterboard to the motherboard, defining at least a first data communication path from the motherboard to the daughterboard (see figures 2 and 4, and see column 3, lines 28-36);

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a microprocessor positioned on the daughterboard, wherein the microprocessor includes a development port (see column 3, lines 28-30, and see column 6, lines 9-26);

at least a second communication path, defined on the daughterboard, providing for communication from the coupler to the development port (see figures 2 and 4);

wherein a boot-up code can be provided from the storage device, over the first communication path, the coupler and the second communication pathway, to the development port of the microprocessor on the daughterboard (see Abstract, figures 2 and 3, and see column 4, lines 33-43.)

Anderson does not teach wherein the development port receives data from an emulator device external to the microprocessor when the development port is coupled to the emulator device.

Tehrani et al teaches a device access controller (see Abstract), in which he teaches wherein the development port receives data from an emulator device external to the microprocessor when the development port is coupled to the emulator device (see column 9, line 28 through column 10, line 27, and see column 13, line 22 through column 14, line 53.)

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Anderson to include wherein the development port receives data from an emulator device external to the microprocessor when the development port is coupled to the emulator device.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Anderson by the teaching of Tehrani et al, because the development port receiving data from an emulator device external to the microprocessor

when the development port is coupled to the emulator device, would enable the system to optionally receive input from a virtual external storage emulator, when one is connected to the system, as taught by Tehrani et al (see column 13, lines 27-30.)

As to claim 2, Anderson teaches wherein the motherboard is configured to download at least the boot-up code, to the development port automatically, in response to a power up or a reset of the electronic device (see column 4, lines 44-67, and see column 6, lines 14-26.)

As to claims 3, 6 and 14, Anderson teaches wherein the daughterboard includes a DRAM (see figure 2) and a memory controller (see figure 2) and wherein the boot-up code comprises configuration information for configuring the memory controller (see column 2, line 59 through column 3, line 22, and see column 5, lines 50-67.)

As to claim 4, Anderson teaches a method for performing boot-up in an electronic device (see column 5, lines 13-17) comprising a motherboard and a coupled daughterboard (see figure 2), the daughterboard comprising a microprocessor, the microprocessor comprising a development port (see figure 2), the method comprising:

automatically downloading at least first boot-up code from the motherboard to the development port, in response to a power-on or reset of the electronic device (see column 4, lines 44-67, and see column 6, lines 14-26); and

using the boot-up code, in the microprocessor of the daughterboard, for performing at least a first boot-up operation (see column 5, lines 13-17.)

Anderson does not teach wherein the development port receives data from an emulator device external to the microprocessor when the development port is coupled to the emulator device.

Tehrani et al teaches a device access controller (see Abstract), in which he teaches wherein the development port receives data from an emulator device external to the microprocessor when the development port is coupled to the emulator device (see column 9, line 28 through column 10, line 27, and see column 13, line 22 through column 14, line 53.)

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Anderson to include wherein the development port receives data from an emulator device external to the microprocessor when the development port is coupled to the emulator device.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Anderson by the teaching of Tehrani et al, because the development port receiving data from an emulator device external to the microprocessor when the development port is coupled to the emulator device, would enable the system to optionally receive input from a virtual external storage emulator, when one is connected to the system, as taught by Tehrani et al (see column 13, lines 27-30.)

As to claims 5 and 12, Anderson teaches wherein the boot-up operation comprises configuring a port, different from the development port (see column 5, lines 60-63.)

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As to claims 7 and 15, Anderson teaches the method further comprising downloading at least a portion of an operating system for the microprocessor, from the motherboard, using the development port (see column 1, lines 56-67.)

As to claims 8 and 16, Anderson teaches wherein the step of downloading the at least first boot-up code is performed while the daughterboard is coupled to the motherboard (see column 3, lines 23-41.)

As to claims 10 and 18, Anderson teaches wherein the first boot-up operation is performed in the absence of storing the boot-up code on a daughterboard non-volatile memory prior to the power-up or reset (see column 3, lines 2-22.)

As to claim 11, the applicant is kindly directed to discussions and remarks made in claims 1 and 4 above.

As to claim 13, Anderson teaches wherein the means for performing the first boot-up operation comprising means for initializing DRAM chip selects (see column 4, lines 1-3, and see lines 33-43.)

#### ***Response to Arguments***

4. Applicant's arguments filed on 18-November-2003 with respect to the rejected claims in view of the cited references have been fully considered but they are moot in view of the new grounds for rejection.

*Conclusion*

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

6. Any inquiries concerning this communication or earlier communications from the examiner should be directed to Tony Mahmoudi whose telephone number is (703) 305-4887. The examiner can normally be reached on Mondays-Fridays from 08:00 am to 04:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dov Popovici, can be reached at (703) 305-3830.

tm

January 12, 2004

  
DIANE D. ALZRAHI  
PRIMARY PATENT EXAMINER  
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